

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for the purification of tetrafluoromethane, comprising contacting tetrafluoromethane containing one or more ethylene compounds, one or more hydrocarbon compounds, carbon monoxide and/or carbon dioxide as impurities with zeolite having an average pore size of 3.4 to 11 Å and an Si/Al ratio of 1.5 or less ~~and/or~~ and a carbonaceous adsorbent having an average pore size of 3.4 to 11 Å to reduce the amount of said impurities.

2. (currently amended): The method as claimed in claim 1, wherein tetrafluoromethane containing said impurities is contacted with zeolite ~~and/or~~ and the carbonaceous adsorbent in a liquid phase.

3. (original): The method as claimed in claim 1 or 2, wherein zeolite is at least one selected from the group consisting of MS-4A, MS-5A, MS-10X and MS-13X.

4. (original): The method as claimed in claim 1 or 2, wherein the carbonaceous adsorbent is Molecular Sieving Carbon 4A and/or Molecular Sieving Carbon 5A.

5. (previously amended): The method as claimed in claim 1 or 2, wherein the one or more ethylene compounds are selected from the group consisting of ethylene, fluoroethylene, difluoroethylene and tetrafluoroethylene.

6. (original): The method as claimed in claim 5, wherein the one or more ethylene compounds are ethylene and/or tetrafluoroethylene.

7. (previously presented): The method as claimed in claim 1 or 2, wherein the one or more hydrocarbon compounds are selected from the group consisting of methane, ethane and propane.

8. (original): The method as claimed in claim 7, wherein the one or more hydrocarbon compounds are methane and/or ethane.

9. (previously presented): The method as claimed in claim 1 or 2, wherein the total content of the one or more ethylene compounds, the one or more hydrocarbon compounds, carbon monoxide and carbon dioxide contained in the tetrafluoromethane is reduced to 3 ppm or less.

10. (previously presented): The method as claimed in claim 1 or 2, wherein the tetrafluoromethane containing one or more ethylene compounds, one or more hydrocarbon compounds, carbon monoxide and/or carbon dioxide as impurities is produced by a direct fluorination method of reacting trifluoromethane with fluorine gas.

11. (previously amended): The method as claimed in claim 1 or 2, wherein the tetrafluoromethane containing one or more ethylene compounds, one or more hydrocarbon compounds, carbon monoxide and/or carbon dioxide as impurities is produced by a direct fluorination method of reacting carbon with fluorine gas.

12. (previously presented): A tetrafluoromethane product having a purity of 99.9997 mass% or more, which is obtained by performing the purification according to the method described in claim 1 or 2.

13. (original): An etching gas comprising the tetrafluoromethane product described in claim 12.

14. (original): A cleaning gas comprising the tetrafluoromethane product described in claim 12.